

CONTRARIAN'S REPORT - ON VIRAL HEMORRHAGIC SEPTICEMIA VIRUS TYPE 4B

PART ONE - June 19, 2009

Foreword

To play the part of CONTRARIAN is not synonymous with playing the part of a fool but perhaps more like playing the "devil's advocate" or *ADVOCATUS DIABOLI*. A contrarian is someone who can remain skeptical of the accepted popular or consensus conclusions in science on the ground that there is still too much uncertainty (or not enough certainty) to make a permanent decision. **This process can be used to test the quality of the original argument and identify weaknesses in its structure.** For those skeptical of Contrarians, it is fully understood that in the vast majority of modern cases, scientific consensus can be expected to hold up under scrutiny precisely because the decision was reached through a lengthy and rigorous process of professional skepticism and criticism. May the truth permit us to pursue a liberty divided from ignorance; aside from craziness; and, for the sheer spite to insanity.

Introduction

This is Part One of a series of publications supporting the *Contrarian's Report* on Viral Hemorrhagic Septicemia Type 4b (VHSv Type 4b). The reader will ask, "What does the Contrarian's Report support?" In the beginning, the Aquatic Livestock Commerce Forum benefited greatly from a professional facilitator. This author believes that a good study of both sides of most issues is not only good for stimulating the thought processes but also good for progress – if progress will be meaningful, long lasting, useful, and profitable for aquatic livestock commerce.

In that vein of thinking, this segment of the *Contrarian's Report* looks at events and facts on VHSv Type 4b. The reader will grasp the actual information available as it lies on a time line of events. Just as the professional facilitator helped the estranged participants of the Forum find common ground, this segment will be an attempt to identify the assorted regulatory actions/events about and surrounding VHSv Type 4b. As the points below are read you may become aware of certain event or lack of actions that contributes to a crippling of the economic livelihood of both private and public aquatic livestock production in the Great Lakes region.

PART ONE: History of Regulatory Actions/Events/Evidence

The following documentation is available publically, as referenced:

Time line of events as excerpted from various State, Federal and International agency/organization publications¹:

- 1930's - VHS was found in European freshwater trout dating to the late 1930s and continues to cause epidemics in European trout farms
- 1963 - Viral hemorrhagic septicemia (VHS), a systemic infection of various salmonid and a few nonsalmonid fishes, is caused by a rhabdovirus designated as the viral hemorrhagic septicemia virus by the Office International des Epizooties in 1963²
- 1988 - it first appeared on the U.S. West Coast in 1988 in marine trout and salmon
- 2000 - started to be noticed in marine fish off the eastern Canadian province of New Brunswick from 2000-2004³
- 2003- Retrospectively tested frozen samples from Lake St. Claire and found the VHSv Type 4b present.⁴
- 2005 - January. The USA suggested the Commission consider de-listing certain strains of listed disease agents that have a world-wide distribution and cause little mortality, such as marine strains of VHS. The Commission recommends the retention of VHS as described in the *Manual of Diagnostic Tests for Aquatic Animals*⁵
 - May 2005, VHSv was first detected in Great Lakes freshwater fish by laboratory testing in December of 2005 from samples collected in May 2005
- 2006 - January 13, 2006 USDA notified OIE of VHSv⁶
 - July 10, 2006 the Follow-up Report (Final Report) was sent to OIE on VHSv (Event resolved)⁷
 - July 2006, the USDA published a notice about VHS in its *Viral Hemorrhagic Septicemia in the Great Lakes, Emerging Disease Notice, July 2006*⁸
 - September 8, 2006 National Aquaculture Association sent a letter to APHIS requesting interim action against VHSv.⁹
 - October 24, 2006. Federal Order on VHSv in Great Lakes States issued¹⁰
 - November 14, 2006, USDA Modifies Restrictions Regarding the Movement of Live Fish Susceptible to Viral Hemorrhagic Septicemia¹¹ to allow Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania and Wisconsin to move interstate live species of fish susceptible to VHSv if the fish can meet certain conditions designed to prevent the spread of the disease, which isn't harmful to people but can be deadly to fish.

CONTRARIAN'S REPORT - ON VIRAL HEMORRHAGIC SEPTICEMIA VIRUS TYPE 4B

PART ONE - June 19, 2009

- 2007 - May 4, 2007, USDA Revises Its Federal Order Regarding the Movement of Live Fish Susceptible to Viral Hemorrhagic Septicemia¹² to allow for catch-and-release fishing activities because they do not unduly increase the risk of introduction and spread of VHS.
- Many Great Lakes basin States impose VHSv Type 4b certification on aquatic livestock originating outside the Federal Order zone.
 - Many States impose certification of aquatic livestock by wildlife protocols of the AFS Blue Book (guidelines) and not permit OIE certification methods as stated in the Federal Order.^{See footnote 9}
- 2008 - April 2, 2008, USDA Amends Its Viral Hemorrhagic Septicemia Federal Order¹³ to require permits before allowing species of live non-salmonid fish from VHS-affected Canadian provinces to be imported into the United States for direct slaughter.
- June 2. Clear fork Reservoir, OH has VHSv Type 4b isolated from fish.¹⁴ VHSv now in OH river basin. No change in the Federal Order to include waters outside the Great Lakes basin as been made at this time.
 - September 9, 2008, publication of the proposed Interim Rule in the Federal Register to become effective November 10, 2008.¹⁵
 - October 28, 2008, USDA, APHIS published a notice in the Federal Register announcing the delay of the effective date of the interim rule until January 9, 2009.¹⁶
- 2009 - January 2, 2009, USDA, APHIS published a notice in the Federal Register delaying the effective date of the interim rule indefinitely to provide APHIS with time to make some adjustments to the interim rule that are necessary for the rule to be successfully implemented.

Questions for Future Discussion

The above timeline of events surrounding the discovery and subsequent regulatory attempt(s) by the USDA, APHIS leaves some earnest questions. You may find the following questions an encouragement to future discussions and comprehension of the truth and reality of the experience with VHSv Type 4b in aquatic livestock:

1. Is VHSv Type 4b a primary pathogen? Does it cause mortalities in the Great Lakes? The answer is still NO when referring to natural conditions for either wild or livestock conditions.
2. Are there any repeated fish kills after the first sighting in a location?
3. Why was the United States representative to the OIE requesting removal of marine variants from OIE's list of reportable diseases?
4. Why did animals and conveyances of interstate commerce NOT move VHSv Type 4b about the Great Lakes during the previous two full years of unbridled commerce and natural movement - before any regulations placed on commercial movement?
5. Where are all the dead fish? There must be pictures to substantiate the huge die-offs and mortality event descriptions.
6. What epidemiological findings support the USDA and State regulatory burden on aquatic livestock producers?
7. Why are we testing and regulating aquatic livestock with wildlife tests and protocols?
8. What level of confidence do the laboratory results bring to certifying movement of aquatic livestock?
9. What is the definition of aquatic livestock? Don't State Natural Resources and Conservation Departments raise aquatic livestock?
10. Who has statutory authority for regulating interstate movement of aquatic livestock for the control, prevention and eradication of pathogens, pests, etc.?
11. Can States regulate interstate commerce or set conditions for importation of aquatic livestock?
12. Why hasn't VHSv Type 4b been found on private aquatic livestock farms?
13. Why has VHSv Type 4b been found in moribund fish AND clinically normal, healthy fish (carriers)?
14. How did the original susceptible species list start with restriction on species rather than the full list of fresh water species in the affected water column?
15. Has VHSv Type 4b earned its nick-name of "Ebola virus of fish" or, is Type 4b one of the Ebola strains that doesn't cause dreaded disease?¹⁷

CONTRARIAN'S REPORT - ON VIRAL HEMORRHAGIC SEPTICEMIA VIRUS TYPE 4B

PART ONE - June 19, 2009

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- ² Office International des Epizooties. 1963. Resolutions. Bull. Off. Int. Epizoot. 59:291295.
- ³ <http://wfrc.usgs.gov/pubs/factsheetpdf/vhsfs2011108.pdf> - accessed on June 15, 2009
- ⁴ Viral Hemorrhagic Septicemia in the Great Lakes - July 2006 Emerging Disease Notice, http://www.aphis.usda.gov/vs/ceah/cei/taf/emergingdiseasenotice_files/vhsgreatlakes.htm - accessed on June 12, 2009
- ⁵ OIE Aquatic Animal Health Standards Commission, January 2005, [http://www.oie.int/aac/eng/FDC%20reports/Jan%202005%20report%20\(English\).pdf](http://www.oie.int/aac/eng/FDC%20reports/Jan%202005%20report%20(English).pdf) accessed on June 11, 2009
- ⁶ Summary of Immediate notifications and Follow-ups – 2006 http://www.oie.int/wahis/public.php?page=single_report&pop=1&reportid=5246 accessed on June 11, 2009
- ⁷ Immediate Notification to OIE on Viral haemorrhagic septicaemia, United States of America http://www.oie.int/wahis/public.php?page=single_report&pop=1&reportid=5246 accessed on June 11, 2009
- ⁸ *Viral Hemorrhagic Septicemia in the Great Lakes, Emerging Disease Notice, July 2006*, http://www.aphis.usda.gov/vs/ceah/cei/taf/emergingdiseasenotice_files/vhsgreatlakes.htm accessed on June 11, 2009
- ⁹ VHSV Action Request (9/8/06), <http://www.thenaa.net/downloads/VHSVltrtoAPHIS.pdf> accessed on June 11, 2009
- ¹⁰ Links broken from the following website to the original Federal Order on VHSv dated October 24, 2006: <http://www.aphis.usda.gov/newsroom/content/2006/10/vhsfish.shtml> this site accessed on June 11, 2009 w/ correspondence sent requesting link to original Federal Order.
- ¹¹ Links broken from the following website to the original Federal Order on VHSv dated November 14, 2006: <http://www.aphis.usda.gov/newsroom/content/2006/11/vhs.shtml> this site accessed on June 11, 2009
- ¹² Links broken from the following website to the original Federal Order on VHSv dated May 4, 2007: <http://www.aphis.usda.gov/newsroom/content/2007/05/vhsfedor.shtml> this site accessed on June 11, 2009
- ¹³ AMENDED FEDERAL ORDER VIRAL HEMORRHAGIC SEPTICEMIA (VHS), April 2, 2008, http://www.aphis.usda.gov/animal_health/animal_dis_spec/aquaculture/downloads/vhs_fed_order_amended.pdf this site accessed on June 11, 2009
- ¹⁴ ODNR CONFIRMS FINDING THE VHS VIRUS IN MUSKIE AT CLEAR FORK RESERVOIR IN NORTH-CENTRAL OHIO <http://www.dnr.state.oh.us/Home/News/NewsReleaseArchives/tabid/19075/EntryID/573/Default.aspx> - accessed on June 15, 2009
- ¹⁵ Viral Hemorrhagic Septicemia; Interstate Movement and Import Restrictions on Certain Live Fish, Federal Register / Vol. 73, No. 175 / Tuesday, September 9, 2008 / Rules and Regulations, 52173 http://www.aphis.usda.gov/animal_health/animal_dis_spec/aquaculture/downloads/vhs_interium_rule.pdf accessed on June 11, 2009
- ¹⁶ Viral Hemorrhagic Septicemia; Interstate Movement and Import Restrictions on Certain Live Fish, Federal Register / Vol. 74, No. 1 / Friday, January 2, 2009 / Rules and Regulations, 1, <http://www.regulations.gov/fdmspublic/component/main?main=DocketDetail&d=APHIS-2007-0038> accessed on June 11, 2009
- ¹⁷ <http://en.wikipedia.org/wiki/Ebola> - accessed on June 15, 2009. The Reston strain of Ebola does not sicken humans.

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